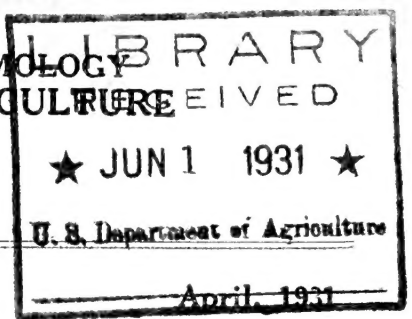


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Number 204

TRUCK CROP INSECTS

W. H. White, Entomologist

D. E. Fink, Entomologist in charge of the insecticide laboratory at Philadelphia, Pa., visited Washington, April 6 and 7, to confer with Bureau officials in regard to the proposed transfer of his laboratory from Philadelphia, Pa., to Takoma Park, Md.

J. E. Dudley, Entomologist in charge of the field laboratory at Madison, Wis., was also a visitor in Washington, April 8 to 10, and while here went over his work on the ecological phases of the pea aphid and discussed future plans for the investigations.

C. F. Stahl, Entomologist in charge of the field laboratory at Sanford, Fla., in company with Dr. Dayton Stoner, Field Assistant at that laboratory, visited Washington during the period April 20 to 26. Dr. Stoner has been engaged for the past three seasons on a study of the relation of migratory and other birds to the celery leaf-tier. His temporary appointment terminated April 14. The primary object of Mr. Stahl's visit was to discuss, in company with Dr. Stoner and Bureau officials, the publication of the results of this work and also the work which has been done during the past few years on the control of the celery leaf-tier and other celery pests.

On April 23 R. E. Campbell and M. W. Stone, of the Alhambra, Calif., field laboratory, had charge of two demonstrations on methods of wireworm control under the auspices of the Ventura County, Calif., Extension Service.

Dr. F. R. Petherbridge, Cambridge, England, was a visitor at the Alhambra, Calif., laboratory on April 25.

R. H. Davidson and F. W. Fletcher have been appointed as Agents and assigned to duty at Columbus, Ohio, to assist with the Mexican bean beetle project.

The following field assistants have been appointed: H. G. Bergen, Twin Falls, Idaho; D. H. Brannon, Walla Walla, Wash.; H. L. Dees, Picayune, Miss.; and E. C. Murdock, Grand Junction, Colo.

FOREST INSECTS

F. C. Craighead, in Charge

A reconnaissance of areas along the western front of the Sequoia and Sierra National Forests was made during the week of March 30 to April 4 by J. M. Miller and Dr. K. A. Salman, of the Palo Alto, Calif., bark-beetle laboratory. They were accompanied on this trip by T. D. Woodbury, of the Forest Service, and Willis Wagener, of the Office of Forest Pathology, Bureau of Plant Industry. Forest officers had reported a heavy loss of yellow pine during the past winter within this area, which includes a narrow strip, approximately 100 miles in length, just above the brush belt. It was found that the western pine beetle was rapidly increasing throughout this area. There had been a deficiency of precipitation in this region for the two preceding seasons, followed by very dry conditions during the winter of 1930-31. This may have been a contributing factor in the recent bark-beetle epidemic.

A discussion of the bark-beetle control problem was the subject of two seminars held by graduate students of the California Forestry School on March 24 and 31. The first discussion was led by J. M. Miller and the second by H. L. Person, of the California Forest Experiment Station, Berkeley, Calif.

A review of the literature and preliminary experiments dealing with the nutritional requirements of the western pine beetle has recently been worked up by R. N. Jeffrey. This review will be used as a basis for further experiments to be carried out during the field season of 1931.

C. E. Hood and J. V. Schaffner, jr., of the gipsy-moth laboratory, were in North Andover, Mass., on April 21 making observations on leaf-miner injury to spruce. On April 23 Mr. Schaffner visited the towns of Harpswell, Southport, Boothbay, and Bristol on the Maine coast for the same purpose. The observations so far made indicate that Epinotia nanana Tr. is the predominant species. Mr. Hood is continuing the control experiments with sprays, which were begun last year, and A. B. Proper will carry on life-history studies with the species concerned.

C. F. W. Muesebeck, of the gipsy-moth laboratory, completed in April a manuscript entitled "Revision of the Nearctic Ichneumon-Flies Belonging to the Genus Macrocentrus."

Dr. M. T. Smulyan, of the gipsy-moth laboratory, was in Nashua, N. H., on April 29, discussing with Dr. A. T. Speare work which Dr. Smulyan is carrying on with a fungus, Entomophthora sp., received from Japan as a parasite of the gipsy moth. Dr. Speare was connected with the Bureau for several years, investigating fungus diseases of insects. He is now in business in Nashua.

C. W. Collins, I. T. Guild, and W. L. Baker, of the gipsy-moth laboratory, spent April 7 at Amherst, Mass., consulting with C. E. Behre and V. E. Jensen, of the Northeastern Forest Experiment Station, regarding a joint report now being prepared that deals with a series of silvicultural plots in different kinds of typical forest stands in that part of New England infested by the gipsy moth. This project was begun as the result of a cooperative agreement entered into between the Bureau and the Forest Service in 1913. Its objects were to ascertain what proportion of trees of different species could be associated to form stands which would not be subject to gipsy-moth ravages, and to determine the best methods of converting existing stands into others better able to resist attack.

L. D. Casey has been appointed Field Assistant at the gipsy-moth laboratory and began work April 13. Mr. Casey has been employed at the laboratory during summer seasons for the past few years.

T. R. Gardner and M. H. Brunson, of the Japanese-beetle laboratory, visited the gipsy-moth laboratory on April 21. While stationed in Japan Mr. Gardner supervised the collection and shipment to Melrose of large numbers of Chaetexorista javana B. & B., a tachinid parasite of the oriental moth, and a fungus, Entomophthora sp., which attacks the gipsy moth in Japan.

W. A. Baker of the European corn-borer laboratory at Monroe, Mich., spent three days at the gipsy-moth laboratory during the latter part of April. He consulted with C. F. W. Muesebeck and R. T. Webber regarding certain taxonomic questions related to investigations of corn-borer parasites.

A. B. Baird, of the Dominion parasite laboratory, Belleville, Ontario, visited the gipsy-moth laboratory on April 25.

INSECTS AFFECTING MAN AND ANIMALS

F. C. Bishopp, in Charge

R. A. Roberts, Assistant Entomologist, of the Uvalde, Tex., field laboratory, spent practically the entire month of April in Mexico, investigating and collecting parasites of blowflies for possible importation into the United States. His itinerary included San Luis Potosi, Tampico, and Victoria, Mexico.

R. W. Wells, of the Galesburg, Ill., field laboratory, was in Washington April 2 for a conference with Department specialists.

George H. Bradley, of the Orlando, Fla., field laboratory, spent April 18 to 30 investigating the recent destructive outbreak of *Simulium* in Mississippi and Arkansas.

F. C. Bishopp spent April 22 and 23 in a survey of the mosquito control work now being conducted by State officials in New Jersey.

F. S. Mulock, of the United States Smelting, Refining, and Mining Company, Boston, Mass., accompanied by George S. Tulloch, a graduate student of Harvard University, arrived in Washington for a series of conferences with F. C. Bishopp and other Department officials on the proposal to conduct a cooperative investigation of the mosquito problem in the vicinity of Fairbanks, Alaska. Tentative plans were laid for Mr. Tulloch to undertake the field work under Mr. Bishopp's direction.

On April 11 F. C. Bishopp and T. P. Cassidy were present at a conference held with the Texas Experiment Station authorities at College Station, Tex., on the investigations of the sheep scab and the goat louse. O. G. Babcock, of the Sonora field laboratory, took part.

COTTON INSECTS

F. C. Bishopp, in Charge

F. C. Bishopp left Washington on April 7 on a trip to Oklahoma, Texas, and Louisiana. On April 9 he participated in a conference of State and Federal officials at Stillwater, Okla., to decide upon a uniform program of boll-weevil control work to be carried out cooperatively in Oklahoma during the present year. State officials attending the conference were D. P. Trent, C. E. Sanborn, E. Hixson, C. F. Stiles, E. E. Scholl, and L. W. Osborn. Mr. Bishopp and T. P. Cassidy, of the Tucson, Ariz., field laboratory, represented the Bureau of Entomology. A plan of procedure was agreed upon and H. C. Young was selected to take active charge of the Bureau field work. On April 11 conferences were held with the Texas Experiment Station authorities at College Station regarding cooperative work on the cotton bollworm. E. W. Dunnam, the Bureau representative at College Station, participated in their conferences.

T. P. Cassidy, Entomologist in charge of the Tucson, Ariz., field laboratory, spent April 11 to 16 at Tallulah, La., conferring with Bureau men there, and arranging for equipment, etc., for the season's activities in Oklahoma. He returned to his regular duties at Tucson on April 22.

C. E. Smith, Associate Entomologist in charge of miscellaneous crop insects at the Baton Rouge, La., field laboratory, spent April 22 at Tallulah, gathering information on emergence and migration of the spotted cucumber beetle.

M. T. Young returned to Tallulah April 13, after completing work at Tucson, Ariz., and Presidio, Tex., to which he had been assigned last winter.

Clyde F. Rainwater reported on April 1 for duty as Junior Entomologist.

Howard C. Massey and Robert L. Spinks were appointed Under Biological Aids in Entomology, and reported for duty April 16.

The following were appointed temporary field assistants and reported for duty in April. Cyrus Conn, Homer T. Rainwater, Earl E. Rogers, Thomas F. Henderson, Beauford A. Kennedy, and William L. Lowry.

DECIDUOUS-FRUIT INSECTS

C. L. Marlatt, Chief of Bureau, Acting in Charge

Luther Brown, who for the past few years has been stationed at the field laboratories at Sligo and Takoma Park, Md., and who for the past two years has been engaged in rearing parasites of the codling moth, was transferred to Albany, Ga., in early April. At the Albany laboratory he will be associated with Dr. Herbert Spencer in investigations of the utilization of *Trichogramma* in the control of the nut case-bearer and other pecan insects. The work will include a general investigation of the parasites of various pecan insects.

John L. Gardiner, who for the past eight months has been stationed at the Brownwood, Tex., pecan insect laboratory, was transferred May 15 to Harriman, Tenn. There he will be associated with H. G. Butler in investigations of the oriental fruit moth, the plum curculio, and the peach borer in the eastern Tennessee region.

M. C. Swingle was transferred from the Japanese-beetle laboratory at Moorestown, N. J., where he was engaged in investigations of parasites, to the deciduous-fruit insects field laboratory at Takoma Park, Md. Mr. Swingle will be engaged in physiological and toxicological investigations of parasites under the general direction of Dr. F. L. Campbell.

H. H. Shepard, Assistant Entomologist at the Takoma Park, Md., field laboratory, resigned, effective March 31, to accept a position in the department of entomology and zoology at the University of Minnesota, St. Paul, Minn.

Earl Lott, of Sanford, Miss., A. J. Warren, of New Haven, Conn., and H. E. Barcklow, of Moorestown, N. J., have been appointed Field Assistants for duty on investigations of oriental fruit moth parasites at the field laboratory at Moorestown, N. J.

The laboratory for investigations of oriental fruit moth parasites received as visitors during the month: Dr. W. W. Storkberger and M. P. Jones, of the Department of Agriculture; S. A. Rehner, of the Bureau of Entomology; and Dr. B. F. Driggers and Mr. Pepper, of the New Jersey Agricultural Experiment Station, New Brunswick, N. J.

Arrangements have been made to ship Macrocentrus ancyliivorus, a valuable North American parasite of the oriental fruit moth, to the French Government. The first shipment of 1,000 cocoons was made on April 24. This shipment was taken from Moorestown, N. J., to New York City by H. W. Allen and placed on board the Italia American Corporation boat "Augustus." It will be received by G. J. Haeussler and M. Balachowsky in southern France.

Visitors to the peach insect laboratory at Fort Valley, Ga., during the month included: G. H. Allen, of the Bureau of the Budget; W. A. Jump, Budget Officer of the Department; E. C. Auchter, L. M. Hutchins, and W. F. Turner, of the Bureau of Plant Industry; F. P. Cullinan, of the Indiana Agricultural Experiment Station; and G. S. L. Carpenter, District Manager for the American Fruit Growers, Inc.

W. M. Davidson and L. J. Bottimer, of the Food and Drug Administration, were at the peach insect laboratory, Fort Valley, Ga., during the first week in April, working on proprietary insecticides for the control of the San Jose scale.

JAPANESE-BEETLE AND ASIATIC-BEETLE RESEARCH

C. H. Hadley, in Charge

On April 7 Dr. H. B. Sprague, Agronomist, of the New Jersey State Experiment Station, was at the laboratory at Moorestown, N. J., to discuss the treatment of lawns to control the larvae of the Japanese beetle.

Edward Mechling, fruit grower and President of Mechling Bros. Chemical Company, Camden, N. J., visited the laboratory several times during the past month to discuss treatment of lawns.

E. G. Rex, of the New Jersey Department of Agriculture, and P. A. van der Meulen and W. E. Fleming, of this laboratory, visited the Lucas Kiltone Company, Vineland, N. J., on April 10 to discuss the preparation of special lead arsenates. Dr. Van der Meulen spent April 30 at the plant supervising the manufacture of these materials.

W. E. Fleming visited the New Jersey State Experiment Station on April 11 to consult the library there.

On April 21 Mr. Underwood, newly appointed agent for Burlington County, N. J., visited the laboratory to become acquainted with the staff.

Dr. W. W. Stockberger, of the Department, and S. A. Rohwer, Assistant Chief of the Bureau, visited the laboratory on April 27 to 29.

On April 28 C. H. Hadley and W. E. Fleming attended a conference in the office of the New Jersey Secretary of Agriculture, William B. Duryee, to discuss the program of the State Department of Agriculture for the control of the Japanese beetle. The conference was also attended by T. J. Headlee, H. B. Weiss, E. G. Rex, and W. Martin, all of the New Jersey Department of Agriculture.

Dr. L. A. Hawkins, of the Plant Quarantine and Control Administration, visited the laboratory on April 29, to discuss control of insects by the use of moist heat and to become familiar with the different experiments being conducted for control of the Japanese beetle.

M. P. Jones, Extension Entomologist in the Bureau, visited the laboratory on April 11 and conferred with the project leaders on phases of their work. Mr. Jones was interested generally in the established parasites.

T. R. Gardner and J. W. Balock, of this laboratory, made a scouting trip to Rutherford, N. J., on April 14, in search of infestations of Aserica castanea and Anomala orientalis. Dense local infestations of these insects were located in sufficient numbers to warrant introduction of the Aserica parasite Tiphia asericarum. It is planned to introduce the parasite this spring.

On April 20 M. H. Brunson and T. R. Gardner made a trip through lower New England to study local conditions at various points of Japanese-beetle infestation, with particular reference to the possibility of distribution of parasites. During the course of their trip they made short visits at the gipsy-moth and corn-borer laboratories near Boston.

Dr. E. P. Felt and Edwin McDerman, of the Bartlett Tree Expert Company, visited the laboratory on April 30, to discuss spraying and other methods for controlling the Japanese beetle.

Clarence Farrell, of Trenton, N. J., who has recently been appointed by the New Jersey Department of Agriculture as Field Assistant to Dr. R. W. Glaser, of the Rockefeller Institute, visited the Japanese-beetle laboratory several times during the month to consult with Dr. Henry Fox regarding the field occurrence of nematode parasites of Japanese-beetle larvae and the method of conducting field experiments with these parasites.

H. C. Hallock, of the Westbury, Long Island, sublaboratory, returned to duty on April 1, after an absence of several weeks on account of a serious illness.

The annual spring survey of larval conditions in various stations within the areas heavily infested by the Japanese beetle was begun in April under the supervision of Dr. Fox. The results to date indicate that in the older areas conditions are much as in 1930, except that the larvae appear to be more uniformly distributed at various topographic levels than was the case in 1930, when a pronounced tendency to congregate at low elevations was evident. This year the indications are that the concentration in low tracts in southern New Jersey is more pronounced than in the sections about Moorestown and Philadelphia. These differences are accounted for on the basis of the varying amounts of rainfall, the concentration at low levels being most pronounced in sections where drought during the period of maximum hatching was most severe.

The following appointments of temporary Field Assistants have been made during the month: C. E. Jennings, for duty at Westbury, Long Island; and Fred Lippincott, for duty at Moorestown, N. J.

CEREAL AND FORAGE INSECTS

W. H. Larrimer, in Charge

A. M. Vance, who has been assigned for several years to the corn-borer parasite laboratory at Hyères, France, returned to the United States April 13. After spending several days in Washington, Mr. Vance went to Arlington, Mass., where he will be assigned to work on corn-borer parasites.

Dr. W. H. Larrimer spent April 5 to 11 at the field laboratories at Webster Groves, Mo., and Wichita, Kans., consulting with the project leaders on the progress of their work.

The following appointments have been made in the division during the month: Fred A. Morton, Junior Entomologist, for duty at Bozeman, Mont.; M. V. Anthony, Field Assistant, at Arlington Farm, Va.; Walter C. Baker, Field Assistant, at Arlington, Mass.; and Fred J. Coy, Field Assistant, at Craig, Colo.

C. M. Packard, in charge of the West Lafayette, Ind., field laboratory, visited the Wichita, Kans., laboratory the week of April 5 for consultation with Dr. Larrimer, J. R. Horton, and others on control of the Hessian fly.

G. F. Allen, of the Bureau of the Budget, and W. A. Jump, of the Department of Agriculture, visited the New Orleans, La., field laboratory on April 22, the sublaboratory at Houma, La., on April 23, and the sublaboratory at Crowley, La., on April 24.

TAXONOMY

Harold Morrison, in Charge

Paul W. Oman spent the first three weeks in April at Ohio State University, Columbus, Ohio, where he worked on various groups of leafhoppers and particularly on some western forms, with the assistance of Prof. Herbert Osborn and Dr. D. M. DeLong.

Professor Samuel Williams, of the department of zoology, University of Pittsburgh, Pa., spent April 1 and 2 in the National Museum, examining the collection of Cerambycidae, especially the species from British Guiana.

E. O. Pearson, a research student of the Empire Cotton-Growing Corporation, who is now spending some time at Harvard University, studied the National collections of bugs of the genus *Dysdercus* April 14 to 18, in connection with a revision of the neotropical species of the genus.

A. M. Vance, of the Bureau's European corn-borer laboratory, Arlington, Mass., recently came to Washington to consult with R. A. Cushman, of the section of Hymenoptera, regarding the morphology of hymenopterous larvae.

C. W. Johnson, Curator of the Boston Society of Natural History, studied the collections of Diptera in the National Museum, April 15 to 17.

Dr. Dayton Stoner was in Washington April 22 to 29 and called at the Taxonomic Unit to consult its specialists.

On April 21 Raymond S. Williams, Curator of Insects in the Williams Natural History Society, Covington, Ky., visited the National Museum to examine methods of installation of insect collections. He also discussed the beetles of his locality with the specialists in the section of Coleoptera.

A. B. Gahan, of the section of Hymenoptera, recently completed an exchange with the Naturhistorisches Museum of Vienna, through which he added to the collections about 200 determined species of Chalcidoidea, mostly European.

Professor Herbert Osborn, of the department of zoology and entomology, Ohio State University, examined the National collections of leafhoppers April 24 to 25.

On April 25 Dr. W. J. Phillips, of the Bureau's cereal and forage insect laboratory at Charlottesville, Va., came to Washington to consult with A. B. Gahan regarding certain joint-worm flies of the genus *Harmolita*.

G. S. Tulloch, of the Bureau's Division of Insects Affecting Man and Animals, is spending several days in the Taxonomic Unit, studying the collection of Alaskan mosquitoes and consulting with C. T. Greene.

Dr. B. Preston Clark, of Boston, Mass., examined the National collections of Sphingidae April 29.

August Busck, of the section of Lepidoptera, has just received from Edward Meyrick, well-known lepidopterist of Marlborough, England, over 100 determined species of South American microlepidoptera, including some cotypes.

BEE CULTURE

Jas. I. Hambleton, in Charge

The library of the Division of Bee Culture is indebted to E. G. Carr, Secretary-Treasurer of the New Jersey Beekeepers' Association, for completing its files of "New Jersey Bee Culture," a publication devoted to the development of beekeeping in that State.

A. L. Freeland, of Dunkirk, N. Y., has been appointed temporary field assistant and reported for duty April 16 at the Bee Culture Laboratory, Somerset, Md.

Visitors at the Division of Bee Culture, Somerset, Md., during the month included H. C. Dadant, a member of the firm of Dadant and Sons, Hamilton, Ill.; Dr. Kurt Wagener, of the Hygienischen Institut der Tierärztlichen Hochschule, Berlin, Germany; Dr. E. F. Phillips, Cornell University, Ithaca, N. Y.; Norman Phillips and L. E. Dills, Ithaca, N. Y.; and George J. Abrams, of the University of Maryland, College Park, Md.

INSECT PEST SURVEY AND EXTENSION ENTOMOLOGY

J. A. Hyslop, in Charge

M. P. Jones, Extension Entomologist, spent the period from March 17 to April 13 visiting extension workers and entomologists in the States of Pennsylvania, New York, Massachusetts, Rhode Island, Connecticut, New Jersey, and Delaware to study the insect problems and methods of carrying on extension entomology in these States. On April 22 to 24 he visited New Jersey to study and observe practices in mosquito control.

TROPICAL, SUBTROPICAL, AND ORNAMENTAL PLANT INSECTS

A. C. Baker, in Charge

Dr. C. A. Weigel, of this office, spent April 22 and 23 in Babylon, N. Y., conferring with F. J. Spruijt as to plans for future work.

The following appointments have been made in this division during the month:

Franklin S. Blanton, Junior Entomologist, effective April 13, for duty at Babylon, N. Y. Mr. Blanton was employed from May 16, 1929, to June 30, 1930, in the ecological unit of the research staff in the campaign for the eradication of the Mediterranean fruit fly.

Charles C. Plummer, Assistant Entomologist, effective April 15, for duty at Cuernavaca, Mex. Mr. Plummer has had previous experience in the Bureau in work with the European corn borer in Connecticut, and also in the Truck-Crop Insect Division in work on the Mexican bean beetle in Mexico.

Dwight L. Hubbart, Under Biological Aid, effective April 6, for duty at Balboa, Canal Zone.

George A. Newton, Field Assistant, effective April 30, for a three-months' assignment at Sumner, Wash.

LIBRARY

Mabel Colcord, Librarian

NEW BOOKS

Acqua, Camillo.

Il bompice del gelso . . . 552 p., illus., Ascoli-Piceno, Casa Editrice de di Giuseppe Cesari, 1931.

Belyea, H. C.

Forest measurement. 319 p., 31 tabs. New York, John Wiley & Sons, Inc., 1931.

Boyd, A. M.

United States government publications as sources of information for libraries. 329 p., New York, H. W. Wilson Co., 1931. [P. 191-214, U. S. Department of Agriculture.]

British Columbia Entomological Society.

Proceedings number twenty-seven, 1930. 51 p., Vancouver, B. C., Murphy & Chapman, Ltd., 1930.

- British Mosquito Control Institute.
Report of the director presented at the fourth annual general meeting . . . 9th December, 1930. 16 p., 30 figs., Hayling Island, Hampshire, England.
- Connecticut State Department of Health.
The mosquito problem of Connecticut and how to solve it. 16 p., 10 figs., Hartford, Connecticut, State Dept. of Health, [1930.]
- Frappa, C.
Contribution à l'étude des Curculionides nuisibles aux plantes cultivées a Madagascar. Gouvernement Général de Madagascar et Dépendences. Bulletin économique. Année 1930 - Numéro 1. Partie Documentation - Etudes, p. 241-259, 1930.
- Gabotto, L.
Gli insetti nocivi alle principali piante legnose coltivate. 100 p., illus., Torino . . . G. B. Paravia & C., 1929.
- Goot, P. van der
De Agromyza-vliegjes der inlandsche katjang-gewassen op Java. 97 p. 8 pls., Weltevreden, Landsdrukkerij, 1930. (Mededeelingen van het Instituut voor Plantenziekten No. 78.)
- Gunder, J. D.
North American institutions featuring Lepidoptera. Pasadena, California, 1930. [Author's separates from Entomological News, 1929 and 1930, bound in one volume.]
- Hingston, R. W. G.
Spiders: their devices for concealment and protection. Journal of the East Africa and Uganda Natural History Society, No. 36, p. 149-156, 15 figs. October, 1929. [Actual date of publication January, 1931.]
- India - Madras, Agriculture, Department of
Reports of subordinate officers for 1926-27, Vol. II, 371 p. Madras, Printed by the Superintendent, Government Press, 1927. [p. 305-336, Administration report of the Government Entomologist, Coimbatore, 1926-27.]
- Lucas, F. A.
Animals of the past; an account of some of the creatures of the ancient world. Ed. 7. 221 p., illus., New York, 1929. (American Museum of Natural History. Handbook series No. 4.)
- Lucas, W. J.
The aquatic (Naiad) stage of the British dragonflies (Paraneuroptera). 132 p., 35 pls., London, Printed for the Ray Society, 1930.
- McDougall, W. B.
Plant ecology. Ed. 2, 338 p., 119 figs., Philadelphia, Lea and Febiger, 1931.
- Maughan, William.
Control of the white pine weevil in the Eli Whitney Forest. 37 p., illus., New Haven, Yale University, 1930. (Yale University School of Forestry. Bulletin No. 29.)
- Metcalf, Z. P.
A text-book of economic zoology. 302 p., 236 figs., Philadelphia, Lea and Febiger, [c1930]

Michigan Academy of Science, Arts and Letters.

Papers vol. XIII. 1930. Editors, Eugene S. McCartney, Peter Okkelberg. Ann Arbor, University of Michigan Press, 1931.

p. 227-39, Anderson, E. G. and Rhoades, M. M. The distribution of interference in the X-chromosome of *Drosophila*.

p. 249-52, Chickering, A. M. Notes and studies on Arachnida I. Aranae from the Lancetilla Valley, Honduras I.

p. 277-89, Hickman, J. R. Respiration of the Haliplidae (Coleoptera)

p. 433-46, Silvey, J. K. Gwynne. Observations on the life-history of *Rheumatobates rileyi* (Berg.) (Hemiptera - Gerridae)

p. 517-41, Werner, W. H. Reginald. Observations on the life-history and control of the fern scale, *Hemichionaspis aspidistrae* Sign.

p. 543-99, Wu, Yi Fang. A contribution to the biology of *Simulium* (Diptera).

Patton, W. S.

Insects, ticks, mites and venomous animals of medical and veterinary importance. Part II.-- Public Health. 740 pp., illus., fold. chart, Croyden, England, H. R. Grubb, Ltd., 1931.

Ris, F.

A revision of the Libelluline genus *Perithemis* (Odonata). 50 p., 9 pls., Ann Arbor, Michigan, Published by the University, 1930. (Univ. of Michigan Museum of Zoology. Miscellaneous publication No. 21.)

Schwarz, H. F.

The nest habits of the diplopterous wasp *Polybia occidentalis* variety *scutellaris* (White) as observed at Barro Colorado, Canal Zone.

27 p., New York, American Museum Natural History, 1931. (American Museum Novitatis No. 471, April 11, 1931.)

Smith, K. M.

A textbook of agricultural entomology. 285 p., illus., Cambridge, University Press, 1931.

Victoria, Royal Society of

Proceedings, vol. XLIII (new series). Part I. 100 p., illus., Melbourne, Ford & Son, 1930.

p. 2-25, Clark, J. New Formicidae, with notes on some little-known species.

p. 26-35, Dodd, A. P. New Hymenoptera Proctotrypoidea from Victoria.

p. 42-61, Rayment, Tarlton. New and remarkable bees.

Wageningen. Plantenziektenkundige Dienst.

De Plantenziektenkundige dienst in Nederland. 2e Herziene druk, 66 p., illus., Wageningen, H. Veenman & Zonen, 1931. (Verslagen en Mededeelingen van den Plantenziektenkundigen dienst te Wageningen, No. 36.)

Wageningen. Plantenziektenkundige Dienst.

Wormstekigheid bij appel en peer. Tweede druk 18 p., 2 pls., Wageningen, H. Veenman & Zonen, 1930. (Verslagen en Mededeelingen van den Plantenziektenkundigen dienst te Wageningen, No. 20.)

BUREAU OF ANIMAL INDUSTRY DESIRES SPECIMENS OF PARASITIC
WORMS FOUND IN INSECTS. IN COMPLIANCE WITH DR. MOHLER'S
REQUEST IN THE FOLLOWING LETTER, BUREAU OF ENTOMOLOGY
EMPLOYEES ARE URGED TO SEND IN SUCH MATERIAL THROUGH
DIVISION CHIEFS.

May 11, 1931.

Dr. C. L. Marlatt,

Bureau of Entomology.

Dear Doctor Marlatt:

Recent studies have been rapidly lengthening the list of arthropods found to serve as intermediate hosts of parasitic worms and it seems evident that hundreds of insects will be incriminated as hosts in the course of time. In this connection it has seemed possible that of the many workers on insects in the Bureau of Entomology some of those who have occasion to dissect insects must find in them parasitic worms and would be willing to salvage these if they thought that they would be of value to anyone. This Bureau would appreciate it if you would bring this matter to the attention of the entomologists in the Bureau of Entomology, with the suggestion that any worms found in insects, or anything suspected of being a worm, might be dropped in a vial of 5 per cent formaldehyde with a slip showing the host insect, the location of the worm, the locality, the collector, and the date of collection, and mailed to the Bureau of Animal Industry. If this could be done it is quite possible that findings of considerable scientific interest would come from it and that these findings would not only assist us in our work, but also be of value in showing the importance of insects and the need for control measures for insects. Insects breeding on land will be hosts in many cases for larval nematodes and tapeworms and those found in water, such as the dragonflies, will be hosts for larval flukes as well.

In addition to the isopods and the numerous crustaceans found in water, the arthropod hosts of worms include Anoplura, Coleoptera, Dermaptera, Diptera, Ephemerida, Hemiptera, Isoptera, Lepidoptera, Mallophaga, Neuroptera, Odonata, Orthoptera, Plecoptera, Siphonaptera, Thysanura and Trichoptera. To the arthropod hosts should be added the Myriapoda and Arachnida.

Any assistance that you give in this connection will be appreciated. Any nematodes found which were strictly insect parasites and not larval stages of parasites of higher animals would be sent to the Office of Nematology for Dr. Cobb's consideration.

Very truly yours,

J. R. Mohler,
Chief of Bureau.

BUSINESS ADMINISTRATION

Cancellation of Condition No. 7 on Standard
Government Bill of Lading.
(Secretary's Memorandum No. 611)

In view of the refusal in some instances of common carriers to accept for transportation Department material under the standard Government bill of lading form No. 1058, G.A.O., General Regulations No. 69, without the cancellation therefrom of section 7 of "Conditions" under "General conditions and instructions" on the reverse of the form, which section reads: "In case of loss, damage, or shrinkage in transit, the rules and conditions governing commercial shipments shall not apply as to period within which notice thereof should be given carriers or to period within which claims therefor shall be made or suit instituted," officers and employees of the Department by whom bills of lading are executed on behalf of the Department should, in case of such specific refusal, cancel the section in question and annex thereto and sign with official title a marginal note, "Cancelled prior to execution under authority of the Secretary of Agriculture." The deletion of the section should be confined to the cases where the carrier makes this action a condition precedent to the transportation of the material.

Certification of Vouchers
(Communication from Comptroller General to
Secretary of Agriculture No. A-27784.)

"In connection with a survey that is now being made of the several bureaus of the Department of Agriculture, it has been found that in the Bureau of Agricultural Economics a procedure has been adopted for the payment of rental vouchers in accordance with the plan outlined in the 'Bureau of Agricultural Economics News,' issue of June 12, 1928, as follows:

'In the interest of speeding up payment of rental vouchers in the future the Business Manager suggests that the various field offices leasing commercial space furnish all the monthly vouchers for the entire fiscal year on July 1. The vouchers will be held in the Section of Audits and Accounts. Around the 25th of each month the vouchers for that particular month will be forwarded to the General Accounting Office for preauditing. This will permit the mailing of checks promptly at the beginning of the succeeding month. Under the present system the checks are not mailed until the 8th or 10th of the month and quite frequently they are delayed more than a month for one reason or another.'

"This procedure is not in harmony with the well established practice affecting expenditure of public funds under which certificates should not be executed until the services described on the vouchers have been rendered. It is possible, also, that the stating of vouchers in advance of the rendition of services, may lead to irregularities in the settlement of the accounts.

"Such a practice seems unnecessary and its discontinuance is requested."

The following abstracts of recent decisions of the Comptroller General of the United States are of general interest:

Vol. 10, A-34556, page 271: Contracts - Mistake in Bid.

"A bidder may not be permitted either to withdraw or reform his bid after the bids are opened, where the bid was as intended and the difference in price quoted by such bidder and the other bidders is not such as to make it unconscionable to require performance in accordance with the bid.

A-34775, page 306: Contracts - Liquidated Damages - Delays.

"Under a contract providing that work should be completed within 30 'working days' after date of receipt of notice to proceed and that liquidated damages should be deducted for each calendar day's delay in completion of the work, the contractor is not entitled to exclude Saturday in computing the 30 working days on the ground that the labor unions in the locality allow only five days' work to the week. Saturday must be counted as a working day under such circumstances."